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     FILE HCAPLUS

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     FILE COVERS 1907 - 23 Jul 2005  VOL 143 ISS 5
     FILE LAST UPDATED: 22 Jul 2005  (20050722/ED)

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     FILE REGISTRY
     Property values tagged with IC are from the ZIC/VINITI data file
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     DICTIONARY FILE UPDATES:  22 JUL 2005  HIGHEST RN 856698-04-9

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     TSCA INFORMATION NOW CURRENT THROUGH JANUARY 18, 2005

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*                                                                    *
* The CA roles and document type information have been removed from *
* the IDE default display format and the ED field has been added,   *
* effective March 20, 2005.  A new display format, IDERL, is now    *
* available and contains the CA role and document type information. *
*                                                                    *
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Structure search iteration limits have been increased.  See HELP SLIMITS
for details.

Experimental and calculated property data are now available. For more
information enter HELP PROP at an arrow prompt in the file or refer
to the file summary sheet on the web at:
http://www.cas.org/ONLINE/DBSS/registryss.html

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=> fil hcaplus
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FILE COVERS 1907 - 23 Jul 2005  VOL 143 ISS 5
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 This file contains CAS Registry Numbers for easy and accurate
 substance identification.

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=> d stat que l8
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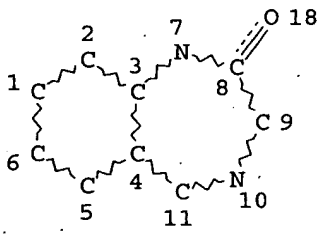


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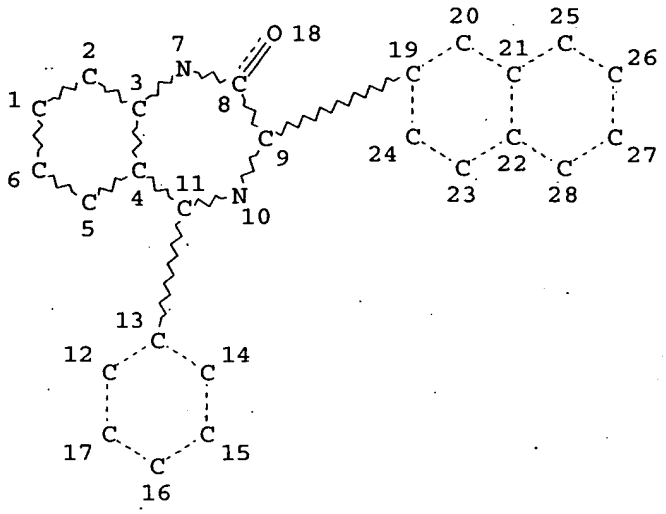

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L8 ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2003:154190 HCAPLUS
DOCUMENT NUMBER: 138:180767
TITLE: Compositions and methods relating to novel benzodiazepine compounds and targets thereof
INVENTOR(S): Glick, Gary D.; Opipari, Anthony W.
PATENT ASSIGNEE(S): The Regents of the University of Michigan, USA
SOURCE: PCT Int. Appl., 123 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 8
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
WO 2003015703	A2	20030227	WO 2002-US26171		20020815
WO 2003015703	A3	20031113			
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RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG					
US 2003119029	A1	20030626	US 2002-217878		20020813
CA 2457405	AA	20030227	CA 2002-2457405		20020815
EP 1423122	A2	20040602	EP 2002-794914		20020815
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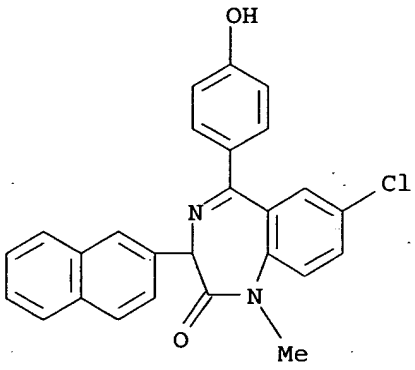
JP 2005502652	T2	20050127	JP 2003-520664		20020815
PRIORITY APPLN. INFO.:			US 2001-312560P	P	20010815
			US 2001-313689P	P	20010820
			US 2002-396670P	P	20020718
			US 2002-217878	A	20020813
			US 1999-131761P	P	19990430
			US 1999-165511P	P	19991115
			US 2000-191855P	P	20000324
			WO 2000-US11599	W	20000427
			US 2000-700101	A1	20001108
			US 2001-767283	A2	20010122
			WO 2002-US26171	W	20020815

AB The invention relates to novel chemical compds., methods for their discovery, and their therapeutic use. In particular, the invention provides benzodiazepine derivs. and methods of using benzodiazepine derivs. as therapeutic agents to treat a number of conditions associated with the faulty regulation of the processes of programmed cell death, autoimmunity, inflammation, and hyperproliferation, and the like.

IT **498557-61-2 498557-68-9 498557-75-8**
498557-82-7
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(compns. and methods relating to novel benzodiazepine compds. and targets thereof)

RN 498557-61-2 HCAPLUS

CN 2H-1,4-Benzodiazepin-2-one, 7-chloro-1,3-dihydro-5-(4-hydroxyphenyl)-1-methyl-3-(2-naphthalenyl)- (9CI) (CA INDEX NAME)



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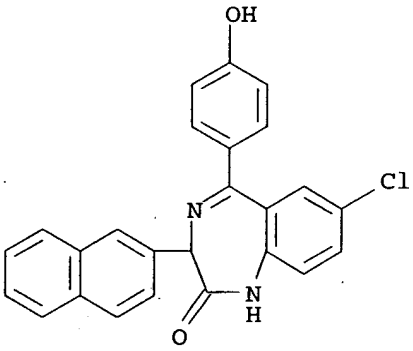

RN 498557-75-8 HCAPLUS
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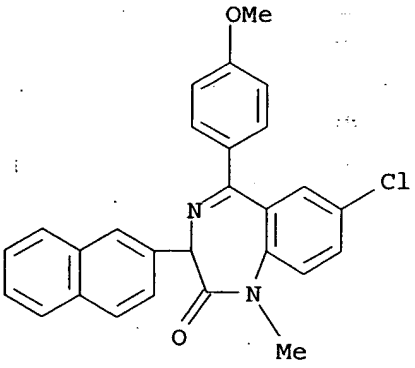

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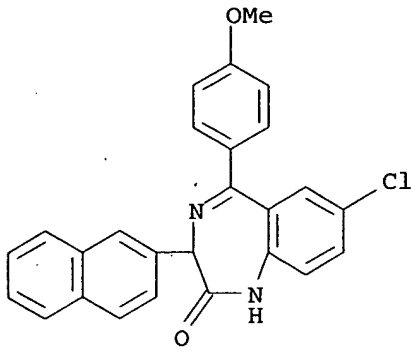

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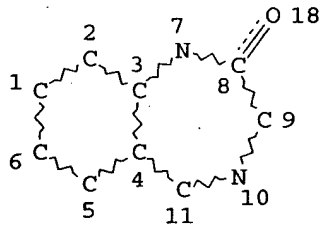
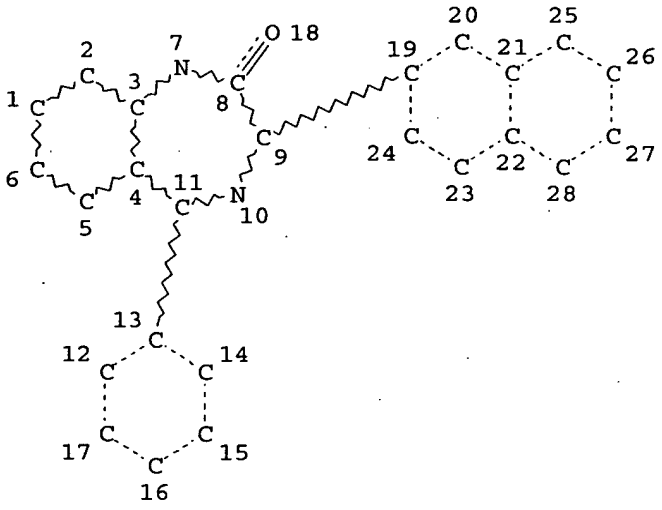


NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 12

STEREO ATTRIBUTES: NONE
L5 28025 SEA FILE=REGISTRY SSS FUL L3
L6 STR



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GRAPH ATTRIBUTES:
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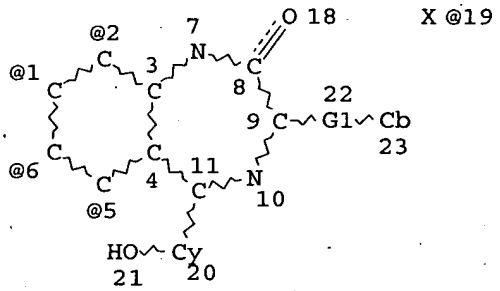

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RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 17

STEREO ATTRIBUTES: NONE
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L18 13 SEA FILE=HCAPLUS ABB=ON PLU=ON L17 NOT L8

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=>

=> d ibib abs hitstr l18 1-13

L18 ANSWER 1 OF 13 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2005:356175 HCAPLUS
DOCUMENT NUMBER: 143:71310
TITLE: Identification and Validation of the Mitochondrial F1F0-ATPase as the Molecular Target of the Immunomodulatory Benzodiazepine Bz-423
AUTHOR(S): Johnson, Kathryn M.; Chen, Xueni; Boitano, Anthony; Swenson, Lara; Opipari, Anthony W.; Glick, Gary D.
CORPORATE SOURCE: Department of Chemistry, University of Michigan, Ann Arbor, MI, 48109, USA
SOURCE: Chemistry & Biology (2005), 12(4), 485-496
CODEN: CBOLE2; ISSN: 1074-5521
PUBLISHER: Cell Press
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Summary: Bz-423 is a 1,4-benzodiazepine that suppresses disease in lupus-prone mice by selectively killing pathogenic lymphocytes, and it is less toxic compared to current lupus drugs. Cells exposed to Bz-423 rapidly generate O2- within mitochondria, and this reactive oxygen species is the signal initiating apoptosis. Phage display screening revealed that Bz-423 binds to the oligomycin sensitivity conferring protein (OSCP) component of the mitochondrial F1F0-ATPase. Bz-423 inhibited the F1F0-ATPase in vitro, and reconstitution expts. demonstrated that inhibition was mediated by the OSCP. This target was further validated by generating cells with reduced OSCP expression using RNA interference and studying the sensitivity of these cells to Bz-423. Our findings help explain the efficacy and selectivity of Bz-423 for autoimmune lymphocytes and highlight the OSCP as a target to guide the development of novel lupus therapeutics.
IT **216691-95-1**, Bz-423
RL: DMA (Drug mechanism of action); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(identification and validation of mitochondrial F1F0-ATPase as the mol. target of immunomodulatory benzodiazepine Bz-423)
RN 216691-95-1 HCAPLUS
CN 2H-1,4-Benzodiazepin-2-one, 7-chloro-1,3-dihydro-5-(4-hydroxyphenyl)-1-methyl-3-(2-naphthalenylmethyl)- (9CI) (CA INDEX NAME)